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Industrial employment and other factors in selecting an area for RURAL DEVELOPMENT

SURVEY OF 8 SOUTHEASTERN STATES

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service
Marketing Research Division

PREFACE

The study on which this report is based is a part of broad-scale research being conducted by Federal and State agencies to obtain basic information needed for the nationwide Rural Development Program.

The Rural Development Program includes action programs for the development of human and other resources in rural areas. It emphasizes improvement of opportunities in agriculture, industrial development in rural areas, expansion of opportunities for nonfarm employment through education and vocational training, and improvement of rural health, welfare, and community facilities.

The program is under the leadership of an interdepartmental committee composed of Under Secretaries of the Departments of Health, Education, and Welfare; Labor; Commerce, Interior; and Agriculture. The chairman of this Committee is Under Secretary of Agriculture True D. Morse.

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Industrial employment and other factors in selecting an area for

RURAL DEVELOPMENT*

*SURVEY OF 8 SOUTHEASTERN STATES

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HIGHLIGHTS

This report presents (1) a general survey of industrial employment in 8 Southeastern States; for use in the Rural Development Program designed to provide more employment for underemployed farmers; and (2) a more intensive study of conditions in Georgia, as an example of the selection of a specific area for rural development work.

Part I of the report deals with conditions in these 8 States, which are among the States where realized net income per farm is lower than the national average. It was found that 73 percent of the 734 counties studied had net increases between 1947 and 1954 in number of manufacturing establishments and, of those with such increases, 76 percent had increases in employment also. The remaining 24 percent had net decreases in employment even though the number of factories rose.

One major factor in the availability of employment for underemployed farmers is the distribution of manufacturing establishments throughout a State--the wider the distribution, the more opportunity there is for jobs for rural employees. The study showed that in 1954, West Virginia had the widest distribution of factories of any of the 8 States, and Mississippi had the least.

Concentration of industry in metropolitan areas reduces the opportunity for employment of rural residents and tends to stimulate migration from farms to areas where industrial employment is available. It was found that manufacturers of durable goods, such as machinery and transportation equipment, are more likely to locate in metropolitan areas, while manufacturers of nondurables, such as foods, textiles, and paper, are more likely to locate in rural areas.

Another factor in the employment picture is the fact that in the southeastern area, 69 percent of the manufacturers employed less than 20 persons each, 20 percent employed from 20 to 99, and only 11 percent employed 100 or more. Possible increases in number of plants, therefore, appeared to be most likely in the category of small plants, of which many are required to provide substantial employment.

Between 1950 and 1954, the 8 States had a net loss of 189,116 farm operators, and employment in manufacturing rose 208,348. It is not known how many of the farm operators were absorbed by industry, but apparently some migration of farmers to other areas took place, especially from Alabama, Mississippi, and West Virginia.

Part II of this report illustrates a procedure for selecting an area within a State for analysis for possible rural development. Georgia is used as an example of this procedure. The State divides roughly into three parts:

Area A comprises 51 counties in the northern mountain region and upper part of the Piedmont Plateau, and is subject to heavy soil erosion. Population increased from 1940 to 1950, and it is principally white. The average size of farms is less than 100 acres. The percentage of farmers working off farms increased during 1949-54. In 1954, the area had 2,650 manufacturing establishments, or 47 percent of the total in the State. There was a net gain of over 40,000 employees in manufacturing during 1947-54.

Area B includes 28 counties in the lower half of the Piedmont Plateau. Soil erosion is heavy. Population has decreased, and it is over 50 percent nonwhite in most counties. The size of farm ranges from about 100 to 300 acres. The number of farmers working off farms has increased. In 1954, the area had 696 manufacturing establishments, or 122 less than in 1947, and a net loss of 4,415 employees during the period. Between 20 and 30 percent of the population were engaged in manufacturing. This area of the State is in greatest need of rural development.

Area C includes 80 counties comprising the Coastal Plain area. Soil erosion is moderate. The population decreased from 1940 to 1950; it is principally white. The size of farm ranges from about 100 to 200 acres. The area is primarily agricultural. There has been an increase in number of farmers working off farms. In 1954, the area had 2,320, or 41 percent, of the manufacturing plants in the State, a gain of 765 over 1947. The net increase in employees was 16,348. Less than 20 percent of the population were engaged in manufacturing in 1954.

All three areas, A, B, and C, had counties with over 50 percent farm population and a family median income of less than $1,500 in 1949. Incomes in many counties with over 50 percent nonfarm population exceeded that amount.

INTRODUCTION

This publication deals with manufacturing plants and employment as they relate to the Rural Development Program in eight Southeastern States. In those States, the realized net farm income per farm is low compared with that in most other States. 1/ The States studied are Alabama, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. An earlier publication (5) treated the subject on a national and State basis. 2/

This report is divided into two parts. The purpose of part I is to present on a county basis for eight Southeastern States the geographical distribution and trend in number of manufacturing establishments between 1947 and 1954. The basic data should be useful (1) to help rural development committees in the preparation of local or area-wide programs; (2) to point out the need for ascertaining the factors causing the decline in those sections of each State which had fewer industrial plants in 1954 than in 1947; (3) to indicate the extent to which certain types of manufacturing establishments were concentrated in metropolitan areas in these States, and what types tended to diffuse throughout the State so as to afford widespread potential employment in low-income farm areas; and (4) to indicate the 1947-54 changes in number of persons employed in manufacturing in relation to changes that took place in number of manufacturing establishments.

Part II pertains to the selection of an area within a State for economic analysis as a basis for designing a rural development program. The data in this report are based on the 1954 Preliminary Report, U. S. Census of Manufactures; the 1954 Census of Agriculture; County Business Patterns, First Quarter 1953, a joint publication of the U. S. Department of Commerce and the U. S. Department of Health, Education, and Welfare, published in 1955; and the 1950 U. S. Census of Population.

PART I.--EMPLOYMENT IN MANUFACTURING IN EIGHT SOUTHEASTERN STATES

Changes in Number of Manufacturers in Relation to Changes in number of Employees

The desirability and feasibility of developing more manufacturing in the southeastern United States to reduce underemployment is a question of widespread interest. Analysis of available data indicates certain relationships in the region that might be significant to low-income areas in all parts of the United States.

1/ "Realized net farm income" includes income from farm products, the value of farm products consumed by the farm family, and the rental value of the farm home.

2/ Underlined figures in parentheses refer to Literature Cited, p. 39.

In 1954, there were 31,738 manufacturing establishments in the 8 Southeastern States studied, compared with 26,122 in 1947. Sixty-nine percent of the establishments in 1954 employed less than 20 persons per plant. Persons employed in manufacturing in the 8 States numbered 1,877,363. There was a net gain of about 200,000 persons over 1947.

Most employment was in six major industries. They were the manufacture of food and kindred products, tobacco products, textiles, apparel and related products, lumber and wood products, and chemicals and their products.

Of the 734 counties in these 8 States, 534 had increases in the number of manufacturing establishments and 166 had decreases (tables 1 and 2). 3/ Thirty-four counties showed no increase or decrease (table 3).

Table 1.--Number of counties in 8 States with increases in manufacturing establishments and increases or decreases in employees, by States, 1947-54

State	Counties in State	Counties with increases in establishments and--				Percent of all counties in State
		Increases in employees	Decreases in employees	Information not available	Total	
	Number	Number	Number	Number	Number	Percent
Alabama	67	32	12	4	48	71.6
Georgia	159	66	13	24	103	64.8
Mississippi	1/ 81	33	7	8	48	59.3
North Carolina	100	59	15	8	82	82.0
South Carolina	46	26	8	4	38	82.6
Tennessee	96	35	14	21	70	73.7
Virginia	2/130	56	12	27	95	73.1
West Virginia	55	19	23	8	50	90.9
Total	734	326	104	104	534	72.8
Percent of group total	---	61.0	19.5	19.5	100.0	---

1/ Information was not available for 1 of the 82 counties in the State.
2/ Includes independent cities in Virginia.

3/ Data include independent cities in Virginia for which data are available and exclude one county in Mississippi for which information was not available.

Table 2.--Number of counties in 8 States with decreases in manufacturing establishments and increases or decreases in employees, by States, 1947-54

State	Counties in State	Counties with decreases in establishments and--				Percent of all counties in State
		Increases in employees	Decreases in employees	Information not available	Total	
	Number	Number	Number	Number	Number	Percent
Alabama	67	5	9	3	17	25.4
Georgia	159	13	26	7	46	28.9
Mississippi	1/ 81	12	14	3	29	35.8
North Carolina	100	8	6	2	16	16.0
South Carolina	46	6	2	---	8	17.4
Tennessee	96	9	3	7	19	20.0
Virginia	2/130	6	15	6	27	20.8
West Virginia	55	---	4	---	4	7.3
Total	734	59	79	28	166	22.6
Percent of group total	---	35.5	47.6	16.9	100.0	---

1/ Information was not available for 1 of the 82 counties in the State.
2/ Includes independent cities in Virginia.

An increase in the number of manufacturing plants is generally looked upon with favor because it is assumed the increase affords greater opportunities for part- or full-time employment, not only for urban population but also for farmers and nonagricultural workers in rural areas who seek additional income. An increase in manufacturing establishments, however, does not always result in a net increase in the number of persons employed in the county. The number of individuals employed by the new establishments may not offset the number of employees released by manufacturing plants that go out of business, consolidate with other firms, or relocate outside the county. For example, 104 counties in the 8 States had net decreases in number of employees even though the number of manufacturing plants increased between 1947 and 1954 (table 1). Of the counties for which data were available, 326 had net increases in both number of manufacturing establishments and number of employees. For the 104 remaining counties, comparable information was not available.

A net decrease in number of manufacturers does not necessarily mean that fewer individuals are employed in manufacturing. In 59 counties in the 8 States which had fewer manufacturing plants in 1954 than in 1947, and for which employee data were available, there were increases in employment (table 2). The increases might have been due to the expansion of existing

Table 3.--Number of counties in 8 States with no net change in manufacturing establishments and increases or decreases in employees, by States, 1947-54

State	Counties in State	Counties with no change in establishments and--				Percent of all counties in State
		Increases in employees	Decreases in employees	Information not available	Total	
	Number	Number	Number	Number	Number	Percent
Alabama	67	2	---	---	2	3.0
Georgia	159	4	5	1	10	6.3
Mississippi	1/81	1	1	2	4	4.9
North Carolina	100	---	1	1	2	2.0
South Carolina	46	---	---	---	---	---
Tennessee	96	3	1	3	7	6.3
Virginia	2/130	2	3	3	8	6.1
West Virginia	55	1	---	---	1	1.8
Total	734	13	11	10	34	4.6
Percent of group total	---	38.2	32.4	29.4	100.0	---

1/ Information was not available for 1 of the 82 counties in the State.
2/ Includes independent cities in Virginia.

plants or the replacing of establishments with new ones that employed a larger labor force. However, in 79 other counties, the number of persons employed in manufacturing did decline with the decrease in number of establishments. For another 28 counties which had fewer establishments in 1954, there either was practically no change in employment or figures were not available.

In the 8 States named, 166 counties had decreases in number of manufacturers in 1947-54, but a total net increase of 13,306 in employees (table 4). In 5 of the 8 States, the total number of employees in manufacturing increased in counties in which the number of establishments decreased; in 3 States, there was a net decrease in employees in such counties. The 5 States showing a gain for these counties were Georgia, Mississippi, North Carolina, South Carolina, and Tennessee. Irrespective of changes in number of establishments, each State except one, West Virginia, had a net gain in employees for the State as a whole.

Considerable efforts and expenditures have been made by States and various organizations in bringing new industries into the different States and communities. However, with 166 counties having fewer manufacturing establishments in 1954 than in 1947, it seems desirable to ascertain why manufacturers in those counties discontinued business, consolidated with others, or moved away. 4/

4/ The net increase or decrease in the State as a whole might be larger or smaller than for the counties covered in this report. This is due to the net change for the counties not included in the study.

Table 4.- State totals of the county net changes in number of employees in manufacturing establishments in 8 southeastern States for which information was available, by States, 1947-54

State	Total counties in State	Counties for which information was available	Aggregate of increases or decreases in employees in counties with increases in manufacturing establishments 1/			Aggregate of increases or decreases in employees in counties with decreases in manufacturing establishments 1/			Aggregate of increases or decreases in employees in counties with no increase or decrease in manufacturing establishments 1/			Net increase or decrease in employees	
			Increases	Decreases	Net increase or decrease	Increases	Decreases	Net increase or decrease	Increases	Decreases	Net increase or decrease	For counties included	For all counties in State
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Alabama	67	60	20,124	3,401	16,723	1,632	6,153	-4,521	1,445	---	1,445	13,647	10,237
Georgia	159	127	43,169	1,744	41,425	18,633	7,323	11,310	309	682	-373	52,362	52,796
Mississippi	82	68	13,247	1,942	11,305	3,870	2,552	1,318	273	502	-229	12,394	14,020
North Carolina	100	89	54,019	10,485	43,534	3,730	1,368	2,362	---	1,508	-1,508	44,388	45,392
South Carolina	46	42	15,483	3,534	11,949	17,572	556	17,016	---	---	---	28,965	29,381
Tennessee	95	65	27,638	1,769	25,869	2,925	584	2,341	1,600	307	1,293	29,503	38,920
Virginia	2/130	94	36,377	4,281	32,096	1,831	15,061	-13,230	132	2,809	-2,677	16,189	25,325
West Virginia	55	47	5,234	10,411	-5,177	---	3,290	-3,290	98	---	98	-8,369	-7,723
Total	734	592	215,291	-37,567	177,724	50,193	-36,887	13,306	3,857	-5,808	-1,951	189,079	208,348

1/ State totals for counties for which information was available.
2/ Includes independent cities in Virginia for which comparable data are available.

Only 34 of the 734 counties in the 8 States showed no increase or decrease in the number of manufacturing establishments (table 3). Of the 24 for which employment information was available, 13 had more persons employed in 1954 than in 1947, and 11 had decreases. For the remaining 10 counties, comparable data on employment were not available.

The varying and sometimes opposite trends in the figures on employment and number of manufacturing establishments show that neither employment figures alone nor number of factories alone is indicative of conditions in the area studied. The two sets of figures must be considered together, along with many other economic factors, in any effort to select an area for rural development work.

Distribution of Manufacturing Plants Within a State

How widely new manufacturing plants are distributed in a State is an important factor in determining potential employment in various sections for those who need additional income. West Virginia, for example, had the widest distribution of new plants, about 91 percent of its counties showing net increases in manufacturing establishments (table 1). Mississippi had the lowest dispersion of new establishments. Only 59 percent of its counties showed increases in number of establishments during 1947-54. Although Mississippi did not have as wide a distribution of new plants as did West Virginia, it did have a higher percentage of counties showing increases in employment accompanying increases in number of manufacturing establishments. South Carolina had a high percentage both of counties with increases in manufacturing establishments and of counties with increases in number of persons employed. The figures for other States are presented in table 1.

Concentration of Manufacturing Establishments in Metropolitan Areas

The greater the concentration of manufacturing industries in metropolitan areas, the more difficult it is for employees living in rural areas to work in factories without commuting considerable distances. 5/ In Alabama, Georgia,

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5/ Because the data for certain counties were combined in a publication "County Business Patterns, First Quarter 1953," issued by the U. S. Departments of Commerce and of Health, Education, and Welfare, the counties included in metropolitan areas in this report do not strictly comply with the Bureau of the Budget definition. Standard metropolitan areas are defined by Federal Committee on Standard Metropolitan Areas of the U. S. Bureau of the Budget as follows: "Standard metropolitan areas are integrated economic and social units with a large volume of daily travel and communication between the central city (50,000 or more population) and outlying parts of the area. Each area (except in New England) consists of one or more whole counties. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force."

Tennessee, and West Virginia, there has been a tendency for manufacturers producing durable goods, such as fabricated metals, machinery, and transportation equipment, to locate in metropolitan areas (table 5). 6/ This is the case in these 4 States and in Virginia in the manufacture also of such nondurable products as paper and chemicals and allied products. However, more of the factories making such nondurable goods as food and kindred products, textiles, apparel, tobacco products, and such durable goods as lumber and wood products, furniture and fixtures, stone, clay, and glass products are in rural counties than in metropolitan areas. In Mississippi, North Carolina, South Carolina, and Virginia, most of the plants making these products are in rural sections.

Many factors determine where a manufacturing plant will locate. It is not the purpose of this report to present that subject. However, an examination of the guide (6) previously referred to and other publications available at the U. S. Department of Commerce, the Small Business Administration, the U. S. Chamber of Commerce, and libraries will furnish information about factors influencing plant location. 7/

Employment in Manufacturing Establishments

Increasing the potentialities for part- or full-time employment of low-income farmers or other underemployed rural labor in manufacturing requires the community to consider at least two basic factors: (1) The type of industry that is feasible, using the available resources, physical and human, and (2) the number of establishments that would be required to absorb the surplus labor. In the 8 Southeastern States studied, 68.8 percent of the manufacturing establishments employ less than 20 individuals each; 19.7 percent employ 20 to 99 persons, and only 11.5 percent employ 100 or more. (5) The percentages vary for the different States and types of industries (tables 6 and 7).

6/ The counties here included in the metropolitan areas in each of the eight States are:

Alabama:	Etowah, Jefferson, Mobile, Montgomery, and Russell.
Georgia:	Bibb, Catoosa, Dade, Walker, Chatham, Chattahoochee, Cobb, DeKalb, Fulton, Houston, Peach, Twiggs, Muscogee, and Richmond.
Mississippi:	Hinds.
North Carolina:	Buncombe, Durham, Forsyth, Guilford, and Wake.
South Carolina:	Aiken, Charleston, Greenville, and Richland.
Tennessee:	Anderson, Blount, Davidson, Hamilton, Knox, and Shelby.
Virginia:	Arlington, Fairfax, Henrico, Norfolk, Princess Anne, Roanoke Counties, and the independent cities of Alexandria, Falls Church, Richmond, Norfolk, Portsmouth, South Norfolk, Virginia Beach City, Roanoke City, Newport News, and Warwick.
West Virginia:	Brooke, Cabell, Fayette, Hancock, Kanawha, Marshall, Ohio, and Wayne.

7/ See Literature Cited, p. 39.

Table 5.- Number of reporting manufacturing establishments and number and percentage of establishments in standard metropolitan areas, by industries and States, 1953 1/

Type of industry	Alabama			Georgia			Mississippi			North Carolina		
	State total	In metropolitan areas		State total	In metropolitan areas		State total	In metropolitan areas		State total	In metropolitan areas	
	No.	No.	Pct.	No.	No.	Pct.	No.	No.	Pct.	No.	No.	Pct.
Food and kindred products	490	174	35.5	732	268	36.6	377	39	10.3	806	205	25.4
Meat products	59	24	40.7	120	34	28.3	40	5	12.5	121	27	22.3
Dairy products	43	15	34.9	31	17	54.8	36	2	5.6	39	13	33.3
Canning, preserving and freezing	16	8	50.0	39	14	35.9	28	1	3.6	27	1	3.7
Grain-mill products	57	6	10.5	101	27	26.7	35	5	14.3	201	25	12.4
Tobacco manufactures	2	1	50.0	5	0	0	1	---	---	56	23	41.1
Textile-mill products	127	12	9.4	316	76	24.1	27	2	7.4	1,057	203	19.2
Apparel and other fabric products	122	29	23.8	323	114	35.3	89	7	7.9	170	61	35.9
Lumber and wood products	2,034	289	14.2	2,661	347	13.0	1,314	52	4.0	2,690	270	10.0
Furniture and fixtures	103	48	46.6	170	92	54.1	40	8	20.0	430	159	37.0
Paper and allied products	29	21	72.4	59	43	72.9	14	---	---	65	26	40.0
Chemicals and allied products	150	79	52.7	297	149	50.2	107	16	15.0	226	91	40.3
Stone, clay, and glass products	173	80	46.2	242	88	36.4	85	13	15.3	233	48	20.6
Fabricated metal products	119	94	79.0	146	113	77.4	46	18	39.1	111	68	61.3
Machinery (except electrical)	84	46	54.8	170	101	59.4	59	9	15.3	211	98	46.4
Electrical machinery, equipment and supplies	15	11	73.3	26	23	88.5	6	1	16.7	27	12	44.4
Transportation equipment	41	33	80.5	48	31	64.6	27	3	11.1	55	20	36.4

Type of industry	South Carolina			Tennessee			Virginia			West Virginia		
	State total	In metropolitan areas		State total	In metropolitan areas		State total	In metropolitan areas		State total	In metropolitan areas	
	No.	No.	Pct.	No.	No.	Pct.	No.	No.	Pct.	No.	No.	Pct.
Food and kindred products	325	93	28.6	678	312	46.0	667	207	31.0	251	97	38.6
Meat products	45	9	20.0	65	37	56.9	87	25	28.7	26	13	50.0
Dairy products	18	6	33.3	91	39	42.9	37	13	35.1	17	7	41.2
Canning, preserving and freezing	23	5	21.7	32	12	37.5	95	11	11.6	10	2	20.0
Grain-mill products	30	6	20.0	141	39	27.7	137	15	10.9	14	4	28.6
Tobacco manufactures	4	1	25.0	11	5	45.5	27	14	51.9	11	3	27.3
Textile-mill products	290	56	19.3	187	71	38.0	134	11	8.2	10	---	---
Apparel and other fabric products	122	42	34.4	182	81	44.5	146	58	39.7	33	17	51.5
Lumber and wood products	1,374	141	10.3	1,401	200	14.3	2,139	151	7.1	961	117	12.2
Furniture and fixtures	54	23	42.6	213	125	58.7	143	62	43.4	31	20	64.5
Paper and allied products	27	11	40.7	52	40	76.9	63	32	50.8	21	12	57.1
Chemicals and allied products	118	44	37.3	183	129	70.5	169	97	57.4	64	41	64.1
Stone, clay, and glass products	117	33	28.2	226	103	45.6	215	73	34.0	202	74	36.6
Fabricated metal products	38	22	57.9	167	128	76.6	109	75	68.8	67	46	68.7
Machinery (except electrical)	51	23	45.1	154	115	74.7	88	38	43.2	81	33	40.7
Electrical machinery, equipment and supplies	3	1	33.3	38	29	76.3	19	9	47.4	28	16	57.1
Transportation equipment	14	8	57.1	36	24	66.7	62	27	43.5	13	9	69.2

1/ County Business Patterns, First Quarter 1953, Parts 5 and 6. Joint publication of U. S. Dept. of Commerce and U. S. Dept. of Health, Education, and Welfare, 1955.

Table 6.--Number of manufacturing establishments in 8 States, by sizes based on number of employees, by States, 1954 1/

State	Total establishments	Number of establishments with--			Percentage of total with--			Change in number of plants, 1947-54, with--		
		1 to 19 employees	20 to 99 employees	100 or more employees	1 to 19 employees	20 to 99 employees	100 or more employees	1 to 19 employees	20 to 99 employees	100 or more employees
	Number	Number	Number	Number	Percent	Percent	Percent	Number	Number	Number
Alabama	3,911	2,759	739	413	70.54	18.90	10.56	2/	-110	57
Georgia	5,666	3,952	1,124	590	69.75	19.84	10.41	2/	62	11
Mississippi	2,263	1,591	472	200	70.30	20.86	8.84	270	-46	54
North Carolina	6,653	4,294	1,454	905	64.54	21.86	13.60	2/	236	113
South Carolina	2,728	1,892	469	367	69.36	17.19	13.45	2/	-7	72
Tennessee	4,060	2,696	823	541	66.40	20.27	13.33	571	58	83
Virginia	4,418	3,121	852	445	70.64	19.29	10.07	660	27	88
West Virginia	2,039	1,519	324	196	74.50	15.89	9.61	475	-32	-6
Total for 8 States	31,738	21,824	6,257	3,657	68.76	19.72	11.52			

1/ Does not include Central Administrator Office and auxiliary units' employees.
2/ Data for years 1954 and 1947 not comparable.

Source: Preliminary Report, 1954 Census of Manufactures. Series MC-g-2.

Table 7.- Percentage of manufacturing establishments in 8 States that employed various number of persons, by type of industry and by States, 1954

State	Food and kindred products				Textile mill products				Apparel and related products			
	Total of establishments	Proportions with --			Total of establishments	Proportions with --			Total of establishments	Proportions with --		
		1-19 employees	20-99 employees	100 or more employees		1-19 employees	20-99 employees	100 or more employees		1-19 employees	20-99 employees	100 or more employees
	Number	Percent	Percent	Percent	Number	Percent	Percent	Percent	Number	Percent	Percent	Percent
Alabama	532	68	24	8	111	8	17	75	140	35	26	39
Georgia	811	65	24	11	327	18	28	54	316	31	31	38
Mississippi	429	68	27	5	28	21	32	47	101	20	18	62
North Carolina	845	65	29	6	1,023	21	31	48	208	30	40	30
South Carolina	371	73	20	7	277	12	19	69	137	24	30	46
Tennessee	743	63	28	9	157	19	34	47	177	27	21	52
Virginia	776	60	32	8	126	12	32	56	169	32	30	38
West Virginia	315	67	27	6	8	---	12	88	37	35	27	38
	Lumber and wood products				Furniture and fixtures				Pulp, paper and products			
Alabama	1,842	83	15	2	107	75	21	4	32	19	25	56
Georgia	2,354	85	13	2	186	70	23	7	67	22	39	39
Mississippi	1,087	80	16	4	47	68	15	17	20	10	25	65
North Carolina	2,485	86	12	2	429	51	28	21	67	30	42	28
South Carolina	1,259	86	11	3	57	75	16	9	25	32	32	36
Tennessee	1,230	86	11	3	191	60	27	13	56	18	43	39
Virginia	1,875	88	10	2	156	58	22	20	63	17	27	56
West Virginia	875	91	8	1	36	61	33	6	22	27	50	23
	Chemicals and products				Petroleum and coal products				Stone, clay and glass			
Alabama	149	52	38	10	26	46	15	39	192	58	30	12
Georgia	286	56	39	5	14	64	14	22	242	73	18	9
Mississippi	99	34	53	13	---	---	---	---	77	68	26	6
North Carolina	217	63	31	6	---	---	---	---	235	64	30	6
South Carolina	119	56	36	8	---	---	---	---	95	61	31	8
Tennessee	183	49	28	23	---	---	---	---	195	72	16	12
Virginia	160	47	34	19	8	75	25	---	198	65	27	8
West Virginia	64	55	15	30	24	50	21	29	186	55	22	23
	Fabricated metal products				Machinery (except electrical)				Electrical machinery			
Alabama	160	60	23	17	107	72	17	11	---	---	---	---
Georgia	152	63	28	9	186	62	27	11	32	53	28	19
Mississippi	58	76	19	5	52	65	27	8	---	---	---	---
North Carolina	136	71	19	10	211	67	26	7	---	---	---	---
South Carolina	58	81	14	5	---	---	---	---	---	---	---	---
Tennessee	194	56	27	17	158	66	25	9	39	56	23	21
Virginia	115	57	24	19	98	69	26	5	---	---	---	---
West Virginia	70	44	27	29	89	64	26	10	19	42	21	37
	Primary metals				Instruments and related products				Miscellaneous			
Alabama	88	22	26	52	---	---	---	---	61	69	21	10
Georgia	39	64	28	8	---	---	---	---	116	77	17	6
Mississippi	---	---	---	---	---	---	---	---	25	80	16	4
North Carolina	40	57	38	5	17	88	---	12	104	82	16	2
South Carolina	11	55	27	18	---	---	---	---	37	81	11	8
Tennessee	55	42	31	27	---	---	---	---	131	63	25	12
Virginia	38	53	29	18	---	---	---	---	39	69	23	8
West Virginia	29	27	23	50	13	77	15	8	30	83	10	7

Because certain types of industries employ less labor per plant than others, some new industries might provide employment for relatively few persons. For instance, 60 to 73 percent of the food processors in each of the 8 States employ less than 20 persons per plant (table 7). In the lumber and wood products industry, 80 to 91 percent of the plants employ less than 20 persons each. In these 2 industries, few plants employ as many as 100 individuals. On the other hand, a substantial percentage of the textile mills in certain States have 100 or more employees per plant. Data by States show that in Mississippi and Tennessee, 47 percent of the mills employ 100 or more persons, in Alabama the proportion is 75 percent, and in West Virginia as high as 88 percent. Also, a considerable percentage of the manufacturers of apparel, pulp, and paper and its products employ 100 or more persons per establishment. The three types of industries just mentioned are producers of nondurable goods. In the manufacture of durable goods such as fabricated metal products and machinery, the percentage of plants having less than 20 employees is relatively high. This is true also in the manufacture of stone, clay, and glass products and, to some extent, in the chemical industry.

An increase in number of manufacturers might take place in any or all 3 sizes of plants (less than 20 employees, 20 to 99, and 100 or more). However, judging from the 1947-54 data, it probably would take place principally in the number of small plants, employing less than 20 persons. Fewer increases in number would likely occur in the medium-size plants, and least in those employing 100 or more persons. Therefore, most communities might anticipate that new plants would be small.

There are certain advantages as well as disadvantages in having 10 or more new establishments, representing as many industries, employing an aggregate of 200 persons, over having 1 new establishment employing 200. Three of the advantages are:

(1) The small plants are likely to be started by local individuals who know the local physical and human resources.

(2) Ten different types of manufacturing establishments are not equally affected by adverse conditions that might develop in a single industry.

(3) It is unlikely that 10 small establishments would be subject to absentee management control, whereas a single large establishment which is a branch of a large organization located elsewhere would be so controlled. Existence of several small plants would make possible flexibility in management decisions.

There are certain disadvantages in having a high percentage of small establishments. Small independent establishments generally do not have the services of specialists in engineering, research, finance, marketing, and various fields of management that are often available to large establishments or to small establishments affiliated with a large organization. Another is the inability to benefit from large-volume operation and from buying raw materials

and selling finished goods in volume. Larger units also might make possible greater specialization, division of labor, and utilization of modern assembly-line equipment, with lower costs of operation.

Most new manufacturing enterprises employ less than 20 persons. It appears desirable, therefore, to ascertain what additional small manufacturing establishments might be suitable for a community or trade area. Likewise, it would be of value to determine the types of plants which would need to be large in order to operate efficiently and market their output successfully.

Large manufacturing corporations purchase raw and manufactured materials from thousands of small concerns. By ascertaining the kinds of products they purchase, it might be possible to discover what commodity a small manufacturer could produce successfully in a given community.

Relationship Between Number of Establishments and Number of Persons Employed in Manufacturing

Data are not available on a county basis for the number of persons employed by each of the 3 size groups of establishments; namely, those employing less than 20, 20 to 99, and 100 or more persons. However, information is available showing the total number of establishments in each industry division in a county and the total number of persons employed by them. The number of manufacturers and the number of employees in the different counties vary widely. Sixteen, or 3 percent, of the 574 counties in the 8 Southeastern States for which data are available had fewer than 10 manufacturing establishments each in 1954 (table 8). 8/ Of the 574 counties, 346, or 60 percent, had from 10 to 39 factories each. Another 29 percent had from 40 to 99 plants, and about 8 percent had 100 or more.

The number of persons employed in manufacturing in the different counties varies widely (table 8). This is partly because there are metropolitan areas in some counties, providing more employment than in others. Figure 1 shows, for the 574 counties, median number of persons employed in relation to the number of manufacturing establishments in a county in 1954. The chart may help to indicate the number of plants needed to absorb a stated number of rural persons seeking employment in manufacturing in a given county. In some instances, employment for 1,000 persons in manufacturing might require as many as 30 to 39 new establishments of various sizes. However, the new plants might also contribute to the employment of others engaged in rendering services to those employed in manufacturing.

As previously pointed out, certain types of industries employ more persons per manufacturing establishment than other types. The number per plant for a given type also differs because of variations in the volume of business done. These differences account in part for the wide range in number of persons employed in one county compared with another having a like number of plants.

8/ The terms "establishments," "factories," and "plants" are used here interchangeably.

Table 8.--Median number of manufacturing employees in counties of 8 Southeastern States relative to number of manufacturers in counties, by groups, 1954

Manufacturers in county	Counties included	Range in number of manufacturing employees per county	Median number of employees per county
Number	Number	--- Number ---	Number
1 - 9	16	100 to 509	150
10 - 19	113	54 to 3,092	317
20 - 29	129	103 to 9,904	620
30 - 39	104	203 to 16,478	1,026
40 - 49	58	245 to 6,861	1,665
50 - 59	37	564 to 19,334	2,032
60 - 69	33	537 to 22,239	2,962
70 - 79	20	982 to 18,568	3,280
80 - 89	15	1,371 to 10,236	5,713
90 - 99	4	2,280 to 12,760	6,878
100 or more	45	3,205 to 58,127	13,270
Total	574		

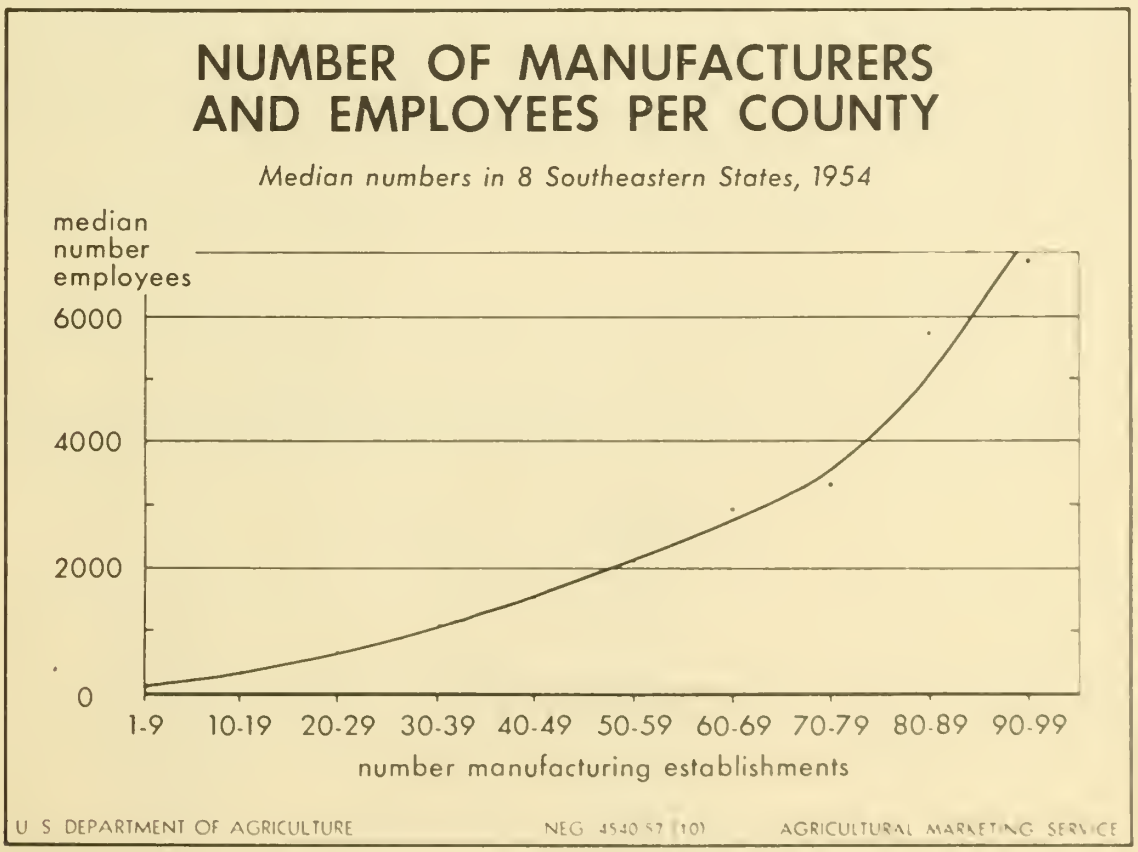


Figure 1

This must be kept in mind when considering how many new establishments might be necessary to provide employment for a stated number of persons seeking off-farm work.

Employment in Manufacturing in Relation to Migration off Farms

During the period April 1, 1947, to April 1, 1955, the net decline in farm population due to migration in the 12 South Atlantic and East South Central States was 1,930,000 persons. (7) This figure includes not only those who were part of the available labor force but also children not of working age. Fifty-three percent of the United States population in 1950, who were 14 years or more of age, were considered to be available as workers in the labor force. (12) Using that percentage, approximately 1,022,900 of those who migrated off farms in the 2 regions mentioned were part of the national labor force. The net increase in number of persons employed in manufacturing in those 2 divisions in 1947-54 was only 352,340. (9) It is therefore evident that a considerable number of those who migrated from farms either moved out of the Southeastern States, or found employment in manufacturing establishments by replacing other workers in the region or were employed in nonmanufacturing establishments.

Table 9 shows the decrease in farm operators from 1950 to 1954 in the 8 States included in this study. Presumably these farm people sought employment elsewhere. The figures presented are larger than the actual migration off farms, because they include farm operators who retired or died. Although for the 8 States combined the increase in persons engaged in manufacturing between 1947 and 1954 exceeded the 1950-54 loss of farm operators, that situation was not true for Alabama, Mississippi, and West Virginia.

Data are not available showing the extent of migration of rural nonfarm population during the same period.

Table 9.--Net increase or decrease in 8 States in number persons employed in manufacturing and as farm operators, by States, 1947-54

State	Net increase or decrease--	
	In employees, 1947-54	In farm operators, 1950-54
	Number	Number
Alabama	10,237	-34,556
Georgia	52,796	-32,442
Mississippi	14,020	-33,748
North Carolina	45,392	-18,974
South Carolina	29,381	-13,673
Tennessee	38,920	-28,482
Virginia	25,325	-14,390
West Virginia	-7,723	-12,851
Total	208,348	-189,116

PART II.--ILLUSTRATIVE PROCEDURE FOR SELECTING AN AREA FOR ANALYSIS

The object of Part II of this report is to present a procedure for selecting an area in a State for economic analysis, preliminary to designing and adopting a rural development program. Designing a rural development program that will meet the needs of an area requires much information. The publication "A Guide for Studying the Economy of Pilot Counties in the Rural Development Program," (6) previously mentioned, shows the many aspects of the economy that need to be considered in developing such a program.

Certain counties in a State may be in greater need of assistance in rural development than others. Some problems also may extend over several counties within the State. Any real solution may call for the cooperative effort of two or more counties or a trade area. Some phases of the work may require the aid of State and Federal agencies.

To determine the actual situation, it appears desirable first to approach the problem from a Statewide viewpoint and then to work towards localization. However, this does not preclude any county, trade area, or community from independently making a study of its own economy at the same time.

To illustrate the Statewide approach, Georgia is taken as an example in this report. Among the 8 Southeastern States studied, Georgia had one of the higher percentages of counties showing a net increase in manufacturing establishments in the period 1947-54, accompanied by an increase in number of persons employed (table 1). Nevertheless, Georgia still has opportunities to improve its agriculture and to increase its manufacturing establishments so as to provide more part- or full-time employment for those of the rural population who need more income to raise their standards of living.

Although outmigration sometimes becomes necessary, it appears desirable, if economically feasible, to develop new work opportunities in the county or trade area needing more employment. There is a social, as well as an economic, cost involved in outmigration. In some instances, the net cost to society may be reduced through outmigration, whereas in other cases it may be increased. That phase of the problem requires study.

Geographical Characteristics

Three Areas Within State

Georgia can be divided topographically into three sections: The north, which is mountainous; the central part, known as the Piedmont Plateau; and the southern half of the State, lying below the so-called "fall line" and known as the Coastal Plain area.

From the standpoint of manufacturing also, Georgia can be divided into three sections. 9/ Area A (fig. 2) comprises 51 counties and includes the northern part of the State and approximately the upper half of the Piedmont Plateau. (8) Area B includes the lower half of the plateau, approximately to the fall line. Area C includes practically all of the counties below the fall line.

Extent of Soil Erosion and Average Size of Farm

The soil in areas A and B of the State has been subjected to considerable erosion. In area C, which lies directly below area B, soil erosion is moderate. In the southeastern part of area C, erosion is light or nonexistent. This is true also of the northern part of area A.

The average size of farms in 1954 in area A, where commercial broiler production has expanded tremendously in recent years, was in most counties less than 100 acres (fig. 2). In areas B and C, it was over 100 acres, and in some counties more than 200 acres.

Ninety-four percent of the 51 counties in area A showed changes in average size of farms during 1950-54 of less than 20 acres. In area B, 61 percent of the counties had changes of less than 20 acres, and in area C, 30 percent (table 10 and fig. 3). The average size of farms increased in 133 counties in Georgia, suggesting that many farm owners are endeavoring to make more efficient use of labor and capital. In the other 26 counties, showing decreases in average size of farms, owners are probably finding part-time or full-time employment in industry or shifting to intensified farming.

Population

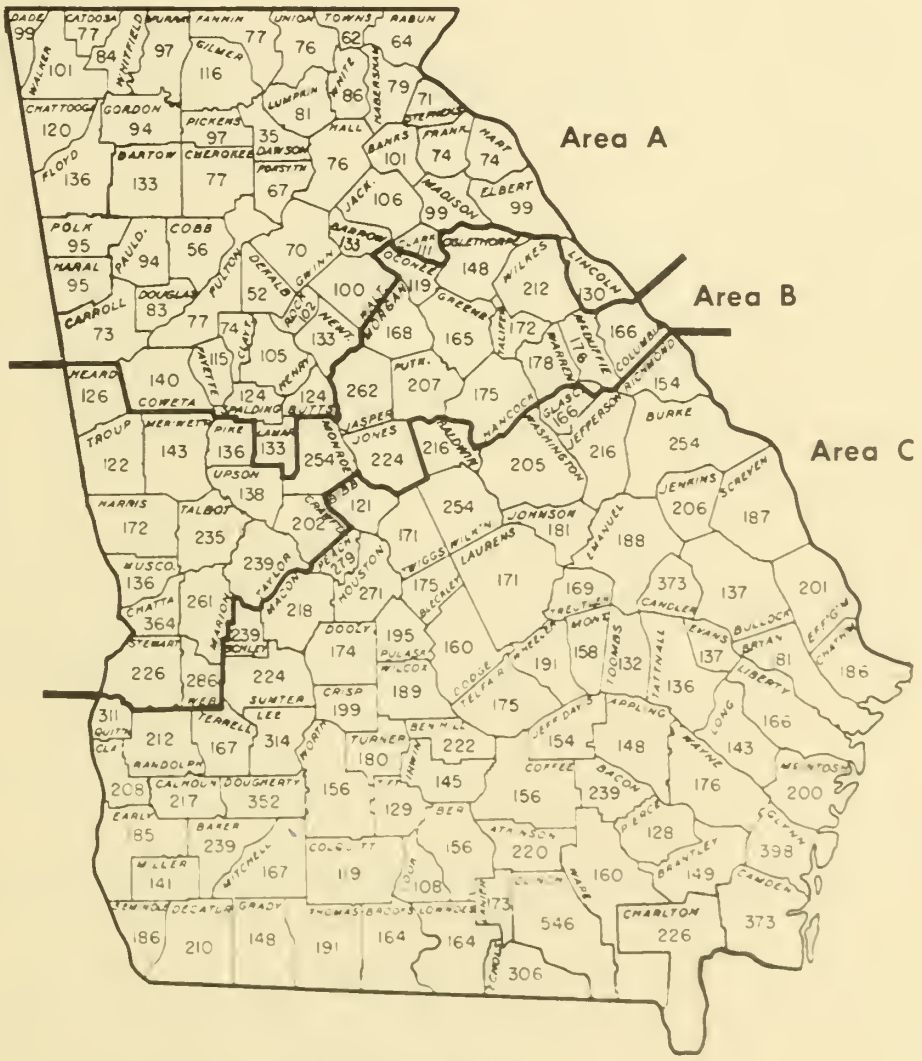
Change in Population from 1940 to 1950

Although an increase of 10.3 percent in population occurred in the State during 1940-50, many counties had losses while others showed gains (fig. 4). The counties in which manufacturing was a principal activity tended to show increases. These counties were for the most part in the northern part of the State designated as area A, and in the southeastern part of area C. The counties which had losses in population were principally those in area B and in the southern part of the State, in area C, where 50 percent or more of the population in 1950 was engaged in agriculture. Further migration of population out of those two sections of the State might be smaller if steps were taken to provide more off-farm employment in industry or greater opportunities for employment on the farm, assuming that soil and topography are suitable for expanded agriculture.

9/ The basis for the division is stated in a later section on manufacturing in Georgia, p. 25.

AVERAGE SIZES OF FARMS IN GEORGIA, BY COUNTIES, 1954

Areas A and B, moderate to severe erosion; area C, moderate to slight erosion



FIGURES INDICATE AVERAGE SIZE OF FARM IN ACRES

U. S. DEPARTMENT OF AGRICULTURE NEG 4541 57 (10) AGRICULTURAL MARKETING SERVICE

Figure 2

Table 10.--Number of counties in 3 areas in Georgia having various sizes of increases or decreases in average size of farms, 1950-54

Area and change in average size of farms	Number of counties showing--	
	Increase	Decrease
Area A		
0 to 9.9 acres	23	11
10 to 19.9 acres	13	1
20 to 29.9 acres	2	---
30 to 39.9 acres	---	---
40 acres or more	1	---
Total	39	12
Area B		
0 to 9.9 acres	5	3
10 to 19.9 acres	8	1
20 to 29.9 acres	4	---
30 to 39.9 acres	4	---
40 acres or more	3	---
Total	24	4
Area C		
0 to 9.9 acres	11	2
10 to 19.9 acres	9	2
20 to 29.9 acres	16	---
30 to 39.9 acres	12	1
40 acres or more	22	5
Total	70	10
Grand total	133	26

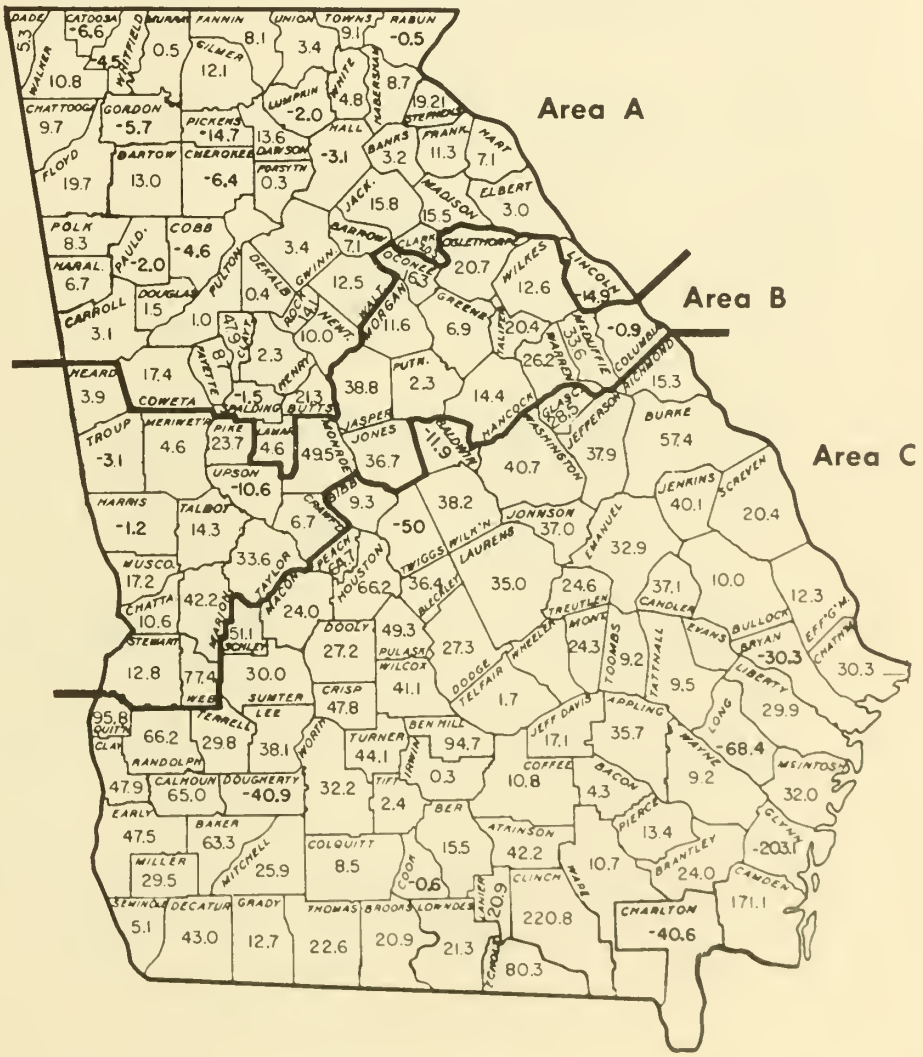
Rural Population

Forty-five percent of the Georgia population of about 3.5 million in 1950 was classified as urban and 55 percent as rural. 10/ Of the rural population,

10/ The Bureau of the Census has employed several definitions of "urban area." According to the definition adopted for the 1950 census, the urban population comprises all persons living in (1) places of 2,500 inhabitants or more incorporated as cities, boroughs, and villages; (2) incorporated towns of 2,500 inhabitants or more except in New England, New York, and Wisconsin, where "towns" are simply minor civil divisions of counties; (3) densely settled urban fringes, including both incorporated and unincorporated areas, around cities of 50,000 or more; and (4) unincorporated places of 2,500 inhabitants or more outside any urban fringe. The remaining population is classified as rural.

INCREASE OR DECREASE IN AVERAGE SIZE OF FARMS

By counties in Georgia, 1950 to 1954



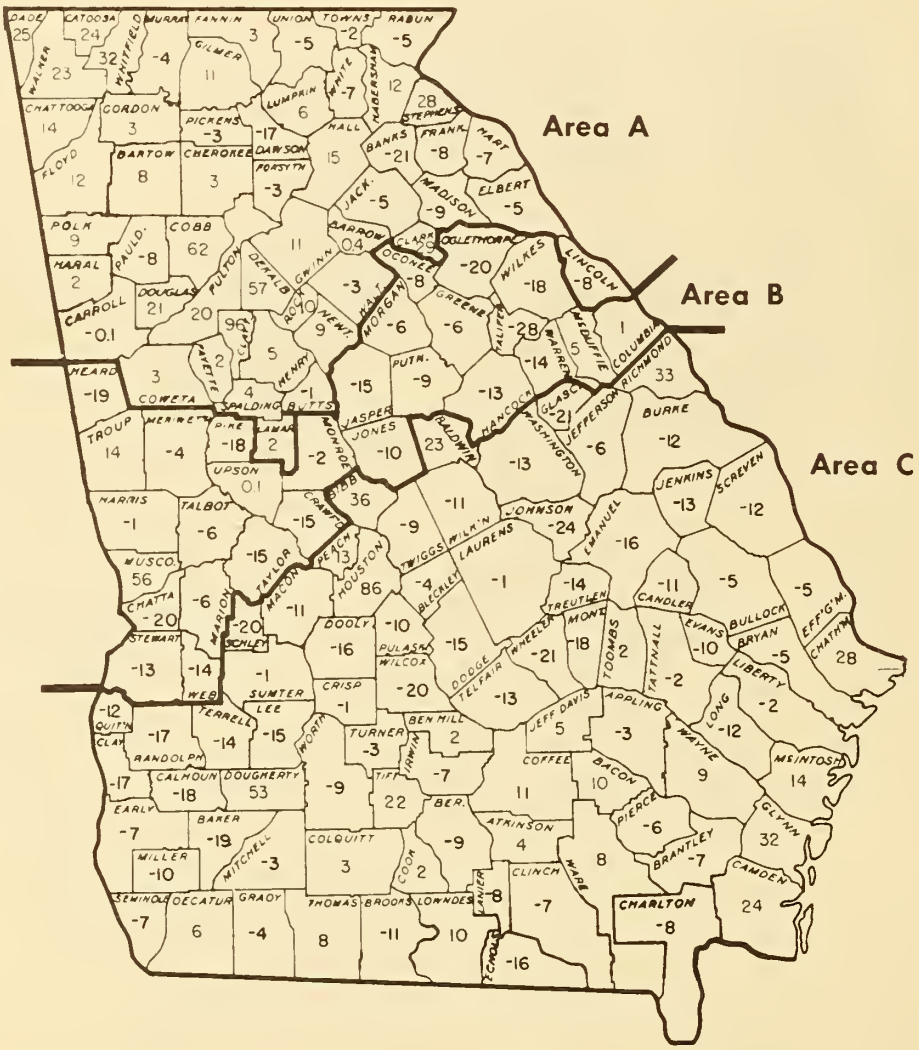
FIGURES INDICATE CHANGES IN ACRES PER FARM

U. S. DEPARTMENT OF AGRICULTURE NEG. 4542 57 (10) AGRICULTURAL MARKETING SERVICE

Figure 3

PERCENTAGE INCREASE OR DECREASE IN POPULATION

By counties in Georgia, 1940 to 1950



SOURCE: U.S. CENSUS OF POPULATION 1950 VOL. II, TABLE 12

U. S. DEPARTMENT OF AGRICULTURE NEG 4543-57 (10) AGRICULTURAL MARKETING SERVICE

Figure 4

about 49 percent was nonfarm. The urban and rural-nonfarm accounted for 72 percent of the population of the State. This left 28 percent as farm population. As of January 1, 1957, the proportions of rural and urban populations were estimated to be about the same as in 1950.

Counties with 50 percent or more of the population engaged in agriculture are located principally in the southern half of the State (fig. 5). The average size of farms is generally from 100 to 200 acres in the various counties in this area, whereas in the northern part of the State where manufacturing is carried on extensively, the average size of farms by county is usually less than 100 acres. Any rural development program, however, should take into account both the rural nonfarm and the farm populations.

Farm Operators Working off Farms

In 116, or 73 percent, of the counties in Georgia, more farm operators were working off farms 100 days or more in 1954 than in 1949 (table 11 and fig. 6). The increase in number of farm operators doing so was less than 25 percent in each of 62 of the counties, and from 25 to 50 percent in each of 33 additional counties. In the other 21 counties, the increase was 50 percent or more. On the other hand, in 43 other counties the number of farmers working off farms was lower in 1954 than in 1949, showing a tendency in these counties toward greater self-employment. Most of the 43 counties were in the southern part of Georgia, where there is less manufacturing than in the northern part of the State. The higher percentage of counties in area C showing greater self-employment may reflect larger increases in average size of farms in that area. The increased acreages apparently resulted in greater use of labor on farms.

Population Engaged in Manufacturing

Twenty-three percent of the persons employed in 1950 in Georgia were engaged in manufacturing. Thirty-two percent of the rural-nonfarm population and about 13 percent of the farm population were engaged in manufacturing.

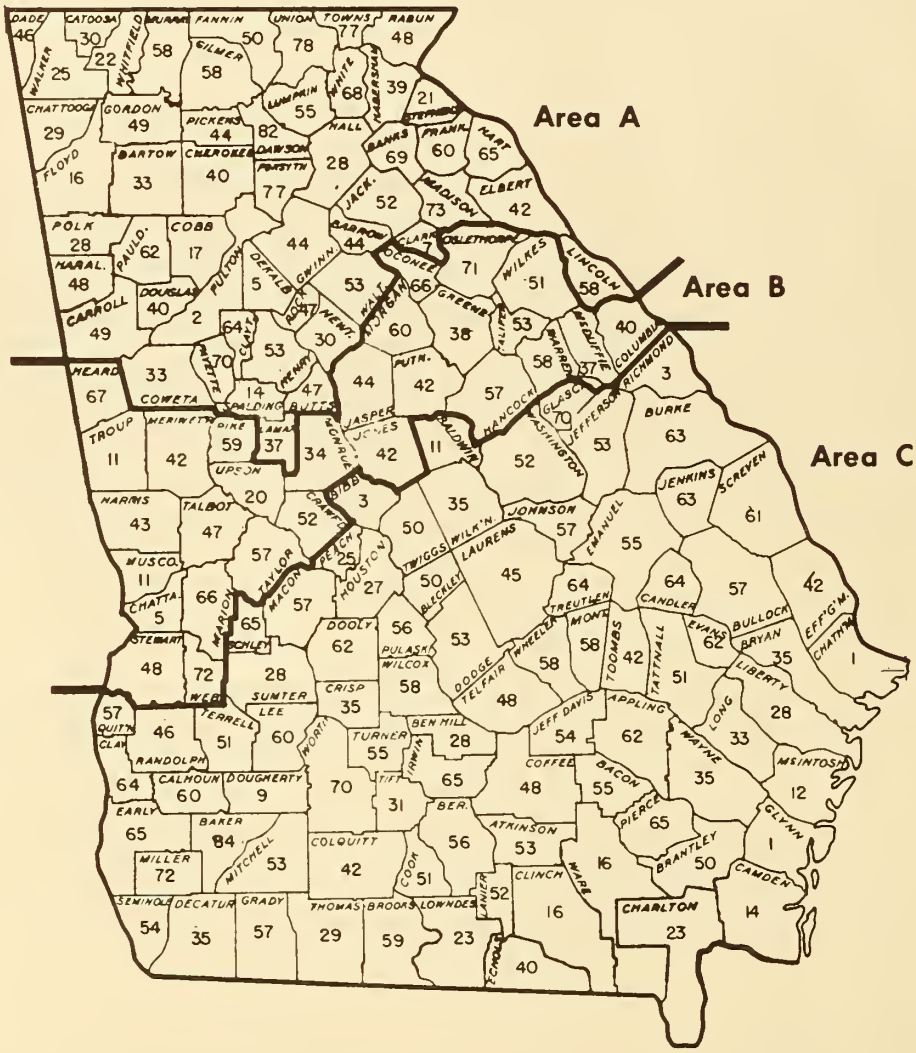
Most of the population engaged in manufacturing are located in the northern half of the State (fig. 7). Except in the counties along Georgia's Atlantic Coast, less than 20 percent of the population of the counties in the southern half of the State in 1950 were engaged in manufacturing.

Nonwhite Population

By county, the nonwhite population in 1950 ranged from less than 1 percent to 74 percent (fig. 8). The upper part of the Piedmont Plateau in area A includes many counties where the percentage of nonwhite population is comparatively small. It is also the area in which most of the manufacturing is carried on. Most of the counties having 50 percent or more nonwhite population lie in the southern half of the Piedmont Plateau, in area B. The counties which lost both manufacturing plants and employees engaged in industry were largely concentrated in that section of the State.

PERCENTAGES OF POPULATION ENGAGED IN FARMING

By counties in Georgia, 1950



SOURCE: U.S. CENSUS OF POPULATION 1950

U. S. DEPARTMENT OF AGRICULTURE NEG. 4544-57 (10) AGRICULTURAL MARKETING SERVICE

Figure 5

Table 11.--Number of counties in Georgia having various percentage changes in number of farm operators working 100 or more days off farms, by areas and groups, 1949-54

Percentage change in number of farm operators	Number of counties in area showing increase or decrease							
	Area A		Area B		Area C		Three areas combined	
	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
	Number	Number	Number	Number	Number	Number	Number	Number
0 - 24.9	23	9	17	5	1/22	19	1/62	33
25 - 49.9	13	2	3	1	17	5	33	8
50 - 74.9	4	---	2	---	6	2	12	2
75 - 99.9	---	---	---	---	5	---	5	---
100 or more	---	---	---	---	4	---	4	---
Total	40	11	22	6	54	26	116	43
Percent	78	22	79	21	67	33	73	27

1/ One county had no increase or decrease.

Manufacturing in Georgia

Number of Establishments

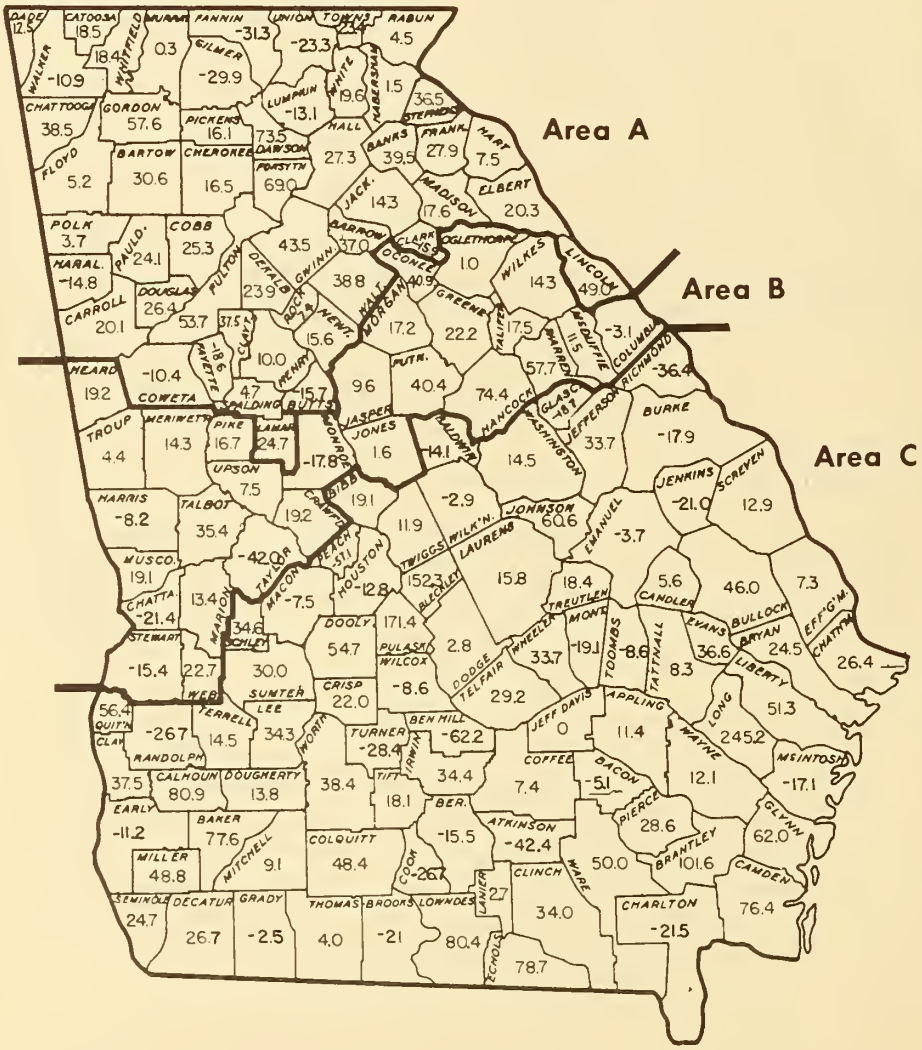
Georgia reported having 5,666 manufacturing establishments in 1954. This is a net gain of 912 firms over 1947. (9) Compared with 1947, a total of 103 counties in Georgia showed net increases in manufacturing establishments, and 46 showed net decreases (part I, tables 1 and 2). Ten counties had no net increase or decrease in number of manufacturers.

Approximately 70 percent of the establishments in Georgia employed less than 20 persons, 20 percent from 20 to 99 persons, and 10 percent 100 or more (table 6). Forty-seven percent of the manufacturing establishments in 1954 were concentrated in the northern counties in area A, 12 percent in area B, and about 41 percent in area C (table 12). Area C had the largest net increase in number of manufacturers during 1947-54. The increase was 49 percent, compared with 11 percent for area A. The increase was principally in factories employing less than 20 persons. Area B had a decline of about 15 percent, with a net loss of 122 plants, mostly small plants.

Sixty-six of the 103 counties that had increases in manufacturing plants also had increases in the number of persons employed in manufacturing; but 13 counties that had decreases in employees nevertheless had increases in number of manufacturers (table 1). Information was not available for the remaining 24 counties. Most of the counties with net decreases in both manufacturing plants and employees were concentrated in that part of the Piedmont Plateau designated as area B (fig. 9). The area comprises 28 counties. Loss of

CHANGES IN PERCENTAGES OF FARMERS WORKING OFF FARMS

By counties in Georgia, 1949 to 1954; farmers in off-farm work 100 days or more

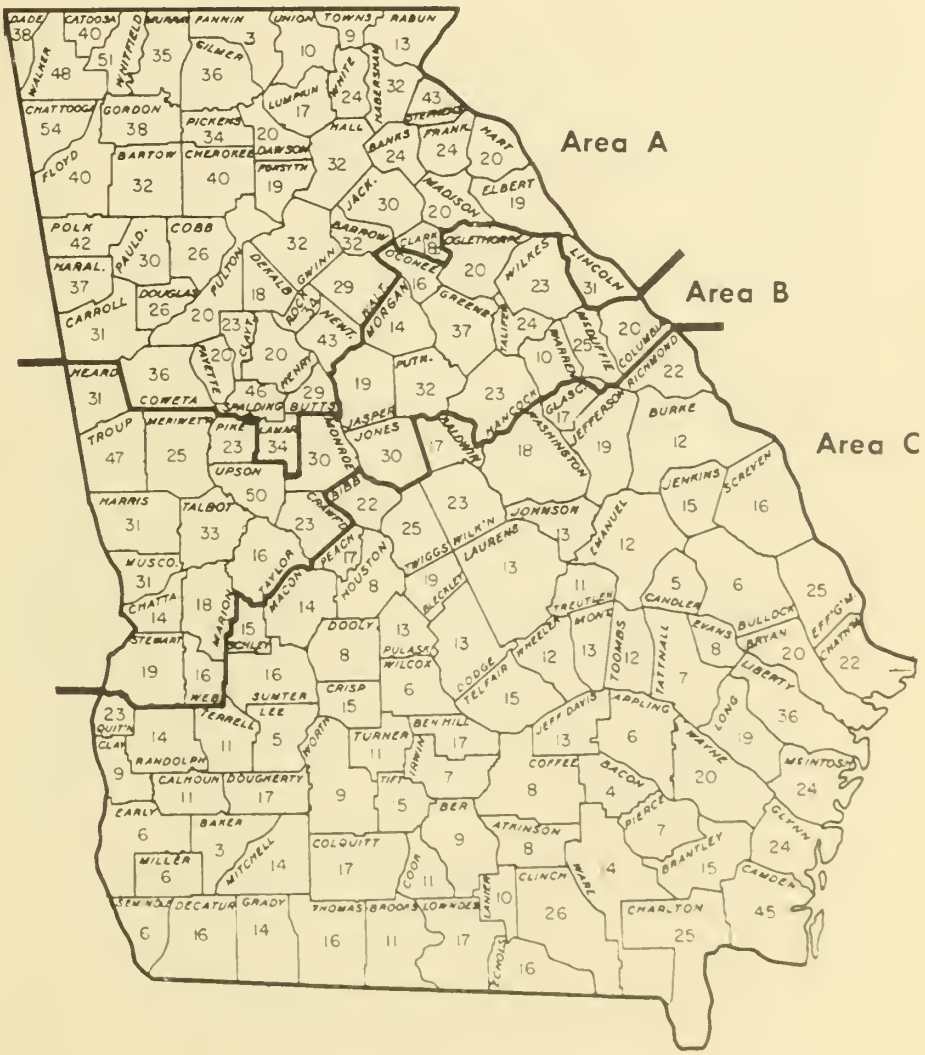


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Figure 6

PERCENTAGES OF POPULATION ENGAGED IN MANUFACTURING

By counties in Georgia, 1950



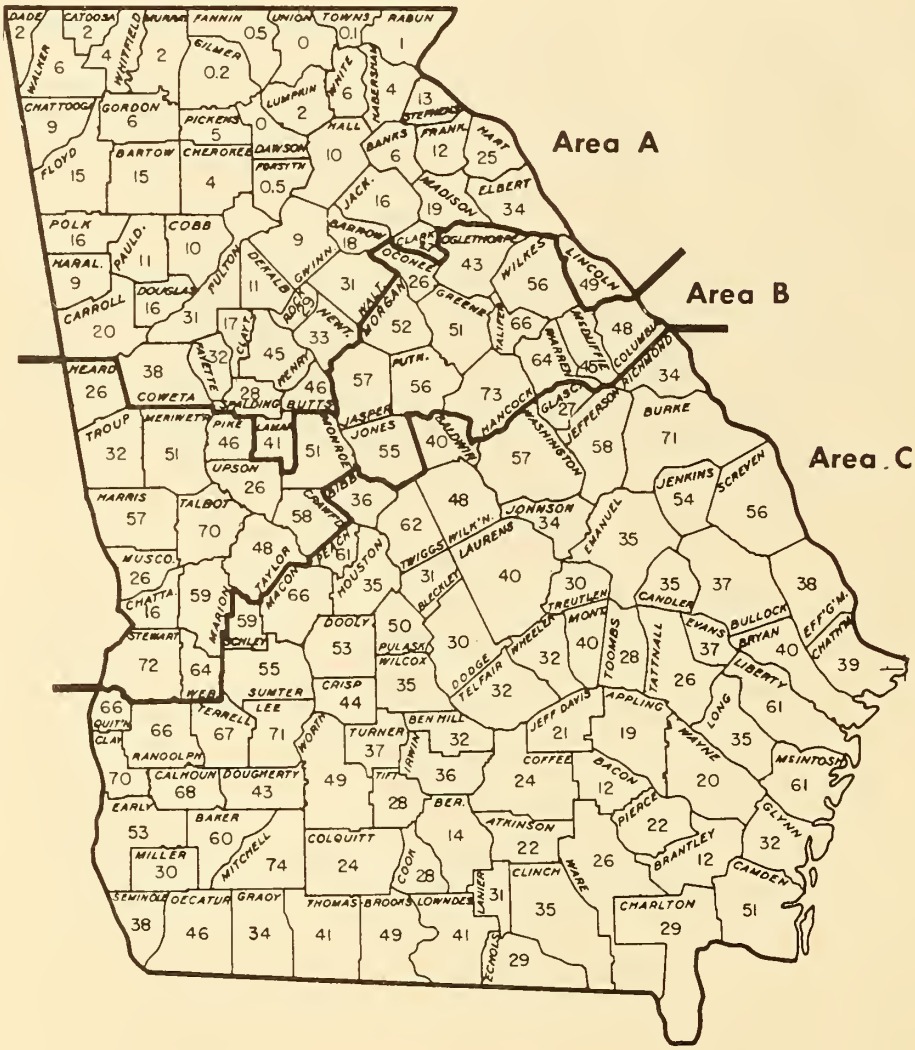
SOURCE: U.S. CENSUS OF POPULATION 1950

U. S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE

Figure 7

PERCENTAGES OF POPULATION IN GEORGIA THAT ARE NONWHITE

By counties, 1950



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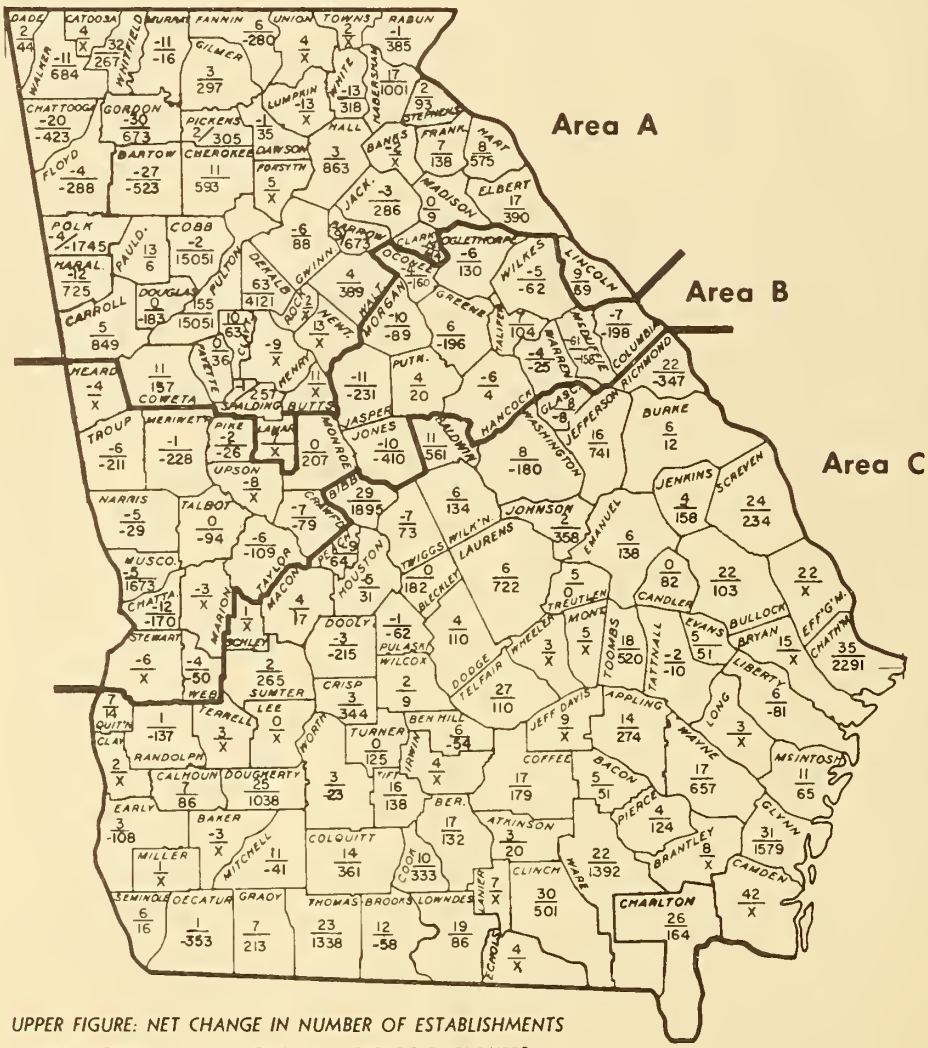
Figure 8

Table 12.--Area totals of county net increases and decreases of manufacturing establishments in 3 areas in Georgia, by size of plants, 1947-54

Area	Total establishments in--		Net gain or loss	Percent of 1947	Total increases and decreases, by size of establishment							
					1-19 employees		20-99 employees		100 or more employees		All sizes of plants	
	1954	1947			Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
	Number	Number	Number	Total	Number of plants		Number of plants		Number of plants		Number of plants	
A	2,650	2,381	269	11.3	315	192	98	31	84	5	497	228
B	696	818	-122	-14.9	20	102	19	55	6	10	45	167
C	2,320	1,555	765	49.2	722	31	95	63	54	12	871	106
Total	5,666	4,754	912	19.2	1,057	325	212	149	144	27	1,413	501
Net increase	912				732		63		117		912	

NET CHANGES IN NUMBERS OF MANUFACTURERS AND EMPLOYEES

By counties in Georgia, 1947 to 1954



UPPER FIGURE: NET CHANGE IN NUMBER OF ESTABLISHMENTS
LOWER FIGURE: NET CHANGE IN NUMBER OF EMPLOYEES

X: CHANGE IN NUMBER OF EMPLOYEES NOT AVAILABLE

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Figure 9

factories, the reduced opportunity for off-farm employment, and severe erosion of farm land contributed to the high percentage of low-income families in area B. Area B is, therefore, a major problem area in the State.

Most of the net increases in factories in areas A and C, and the losses in area B, were among establishments employing less than 20 persons. Each of the 3 areas, however, lost some factories employing more than 20 persons, even 100 or more (table 12). The gains in areas A and C of plants employing 100 or more persons more than offset the losses. The actual reasons for the loss of manufacturing establishments in any of the three areas cannot be stated without a special survey. Such a study should prove worthwhile.

Intrastate Distribution of Manufacturing Establishments

Data are available for 1953 showing the distribution of various types of manufacturing establishments within the States. (14) In some cases where counties are parts of metropolitan areas, the figures may include two or more counties.

Analysis of the county data reveals that in Georgia over 50 percent of the manufacturers of durable goods, such as furniture and fixtures, fabricated metals, machinery, and transportation equipment, and also of paper and its products, are in metropolitan areas (table 5). 11/ The manufacture of textiles, apparel and related products, lumber and wood products (excluding furniture), and stone, clay, and glass, and the processing of food and kindred products are carried on in factories located principally in the rural areas. Plants making chemicals are about equally divided between rural and metropolitan sections of the State. In 1954, production of nondurable goods in Georgia employed 3 times as many persons as manufacture of durable goods. (10). To be employed in manufacture of durable goods, in which pay is usually higher than in production of soft or nondurable goods, many persons living in rural communities in Georgia may now find it necessary to travel a considerable distance to places of employment in metropolitan areas. In view of the higher wage scale, it appears particularly desirable to induce manufacturers of durable goods to locate in rural areas if it is feasible to do so. However, such industries would have to develop certain skills in the people employed. Vocational education would be helpful in this situation.

Net Changes in Number of Employees in Manufacturing, 1947-54

In 69 counties, or 54 percent of the 127 counties in Georgia for which information was available, the 1947-54 net change in number of employees of manufacturing establishments was less than 200 persons per county (table 13). In 39 of these counties, there were net increases, and in 30 net decreases in employees. In another 25 counties, the change ranged from 200 to 399 persons. In the remaining 33 counties, the figures ran from 400 to more than 1,000 individuals. There were net increases of 500 or more employees in 28 counties.

11/ For counties included in the metropolitan areas, see footnote 6, p. 9.

Table 13.--Number of counties in Georgia by sizes of net increases or decreases in number of manufacturing employees, 1947-54 1/

Size of increase or decrease	Counties with-- Net increases	Counties with-- Net decreases	Total
	Number	Number	Number
Less than 50 employees	14	8	22
50 to 99	12	12	24
100 to 199	13	10	23
200 to 299	7	7	14
300 to 399	9	2	11
400 to 499	---	2	2
500 to 599	6	1	7
600 to 699	5	---	5
700 to 799	4	---	4
800 to 899	2	---	2
900 to 999	---	---	---
1,000 or more	11	2	13
Total	83	44	127

1/ Comparable information not available for 32 counties.

and net decreases of that magnitude in 3 counties. The net increases of 200 or more employees were about equally divided between counties in areas A and C. The counties with decreases of that amplitude were about equal in areas A and B, with only 3 in area C. Only 4 of the counties having net changes of 1,000 or more employees contained standard metropolitan areas. Most of them therefore were in counties which can be designated as primarily rural.

During 1947-54, area A showed the largest net increase in number of persons employed in manufacturing (table 14). The net gain was 40,246, as compared with an increase of 16,348 for area C and a decrease of 4,415 for area B. Of the increase of 40,246 in area A, 30,611 was in metropolitan counties and therefore involved urban as well as rural-nonfarm personnel. In area C, the increase was largely in nonmetropolitan counties and therefore benefited the rural population to a greater extent because of greater opportunities for off-farm employment. 12/ In area B, 1,843 of the 4,415 decrease in employees was in the Columbus metropolitan area.

Promotional Activities

Development corporations in Georgia are generally set up to provide buildings for responsible manufacturers on advantageous terms, such as favorable

12/ See footnote 6, p. 9, for list of counties included in metropolitan areas in this report.

Table 14.- Total of county net increases and decreases in number of persons employed in manufacturing in 3 areas in Georgia, 1947-54

Types of counties	Area A		Area B		Area C	
	Number of counties included	Total of net changes in employees	Number of counties included	Total of net changes in employees	Number of counties included	Total of net changes in employees
Counties with net increases in number of employees						
In counties with increases in number of establishments	22	---	2	124	42	---
In metropolitan counties	---	14,376	---	---	---	4,186
In other counties	---	10,334	---	---	---	13,559
In counties with decreases in number of establishments	9	---	1	4	3	168
In metropolitan counties	---	15,735	---	---	---	---
In other counties	---	2,726	---	---	---	---
In counties with no increase or decrease in number of establishments	2	45	---	---	2	264
Total	33	43,766	3	128	47	18,177
Counties with net decreases in number of employees						
In counties with increases in number of establishments	5	---	---	---	---	---
In metropolitan counties	---	---	---	---	---	-374
In other counties	---	-67	1	-196	11	-1,043
In counties with decreases in number of establishments	1	---	---	---	---	---
In metropolitan counties	---	---	---	-1,843	---	---
In other counties	---	-2,990	18	-2,203	3	-287
In counties with no increase or decrease in number of establishments	2	-463	2	-301	1	-125
Total	8	-3,520	21	-4,543	15	-1,829
Net of all counties	---	40,246	---	-4,415	---	16,348
Counties for which change in number of employees was not available						
Counties with net increases in establishments	8	---	---	---	16	---
Counties with net decreases in establishments	2	---	4	---	1	---
Counties in which number of establishments showed no net change	---	---	---	---	1	---
Total	10	---	4	---	18	---

Table 14

rent with the privilege of subsequent purchase. This makes it possible for manufacturers to enter new areas or expand existing establishments without using their capital resources for land and construction. Georgia in 1956 had 46 community industrial development corporations in 43 counties. (4) In addition, there are a considerable number of local private agencies interested in industrial development.

Twenty-six of the 46 communities having industrial development corporations in Georgia are in areas A and B, in the northern half of the State above the Piedmont Plateau "fall line." Fourteen of these counties had net losses totaling 149 manufacturing establishments in the 1947-54 period. Ninety-eight of the plant losses were in area A and 51 in area B. Nine other counties in area A, however, showed a total increase of 153 plants. No counties in area B that had development corporations showed an increase in the number of manufacturing establishments (table 15).

Eighteen counties in area C, in the southern half of the State, had industrial development corporations. Four of the counties had a total net loss of 20 manufacturers in 1947-54. However, 13 other counties showed a total increase of 115 establishments. One county had no net change in number of establishments.

To what extent the development corporations have been successful in their operations cannot be stated. It might be desirable to study their effectiveness in carrying out a rural development program in Georgia. The results should serve as a guide to the establishment and operation of such development corporations in other areas.

Comparative Family Incomes in Counties with Populations Principally Nonfarm or Principally Farm 13/

It is generally believed that counties with a high percentage of nonfarm population have median family incomes higher than those counties in which the population is predominantly on farms. The 1950 U. S. census data, where comparable figures are available, indicate that this is true. In Georgia in 1949, 81 of the 159 counties, or 51 percent, had populations that were over 50 percent nonfarm. In area A, 63 percent of the counties were in that classification; area B, 54 percent; and area C, 43 percent. Seventy-eight counties in the State had populations which were over 50 percent farm. In area A, 37 percent of the counties were in that category; area B, 46 percent; and area C, 57 percent.

The median family incomes in 1949 in 74 of the 78 counties in which the population was over 50 percent farm were less than $1,500. For the other 4 counties, median incomes were from $1,500 to $2,000. On the other hand, in only 33 of the 81 counties in which the population was over 50 percent nonfarm

13/ Based on 20-percent sample of persons 14 years of age and over. Family income for 1949 includes money, wages, or salary received, the net income received from self-employment, and income other than earnings.

Table 15.—Change in number of manufacturing establishments in Georgia counties having industrial development corporations, by areas, 1947-54

Area and county	Net change in establishments		Area and county	Net change in establishments		Area and county	Net change in establishments	
	Increase	Decrease		Increase	Decrease		Increase	Decrease
	Number	Number		Number	Number		Number	Number
Area A			Area B			Area C		
Bartow	---	27	Crawford	---	7	Appling	14	---
Carroll	5	---	Jasper	---	11	Bacon	5	---
Chattooga	---	20	Marion	---	3	Colquitt	14	---
Cherokee	11	---	Meriwether	---	1	Dodge	4	---
Cobb	---	2	Monroe	---	---	Dooly	---	3
DeKalb	63	---	Morgan	---	10	Early	3	---
Elbert	17	---	Muscogee	---	5	Grady	7	---
Floyd	---	4	Stewart	---	6	Jenkins	4	---
Filmer	3	---	Talbot	---	---	Lanier	8	---
Gordon	---	30	Upson	---	8	Lowndes	19	---
Habersham	17	---				Mitchell	11	---
Hall	3	---				Peach	---	9
Polk	---	4				Pierce	4	---
Walker	---	11				Pulaski	---	1
Walton	4	---				Seminole	6	---
Whitfield	30	---				Tift	16	---
						Turner	---	---
						Twiggs	---	7
Total	153	98		---	51		115	20
Grand total (3 areas)							+268	-169

were the family median incomes less than $1,500. In the remaining 47 counties, median incomes ranged between $1,500 and $4,000, principally under $2,500. These data indicate that in Georgia in 1949, family incomes in counties with populations 50 percent or more on farms were lower than in counties with large nonfarm populations (fig. 10, table 16). This also apparently holds true for each of the three areas, A, B, and C, in that State. In area A, where about 63 percent of the counties in 1950 had populations over 50 percent nonfarm, and where most of the manufacturing plants in Georgia were located, families in 3 percent of the counties with largely nonfarm populations and 37 percent of those with largely farm populations had a median income of less than $1,000. For area C, largely agricultural, the corresponding percentages were 3 and 39.

Area B had the highest percentage of counties in which the median income of all families was less than $1,500 in 1949. It therefore appears that the families in area B are in the greatest need of assistance from a rural development program in that State, as judged by levels of monetary income. Whether or not a program can be developed, recommended, and adopted is dependent on a number of factors, such as the attitude of the community, education and skills of the people, and availability of leadership to develop a program and aid in putting it into effect.

Selecting the County or Trade Area

After differences among the three areas in Georgia, from various angles, have been considered, the next step is to determine what pilot counties or trade areas should be selected for rural development work. This is the task of the State committees for rural development. The task of preparing and adopting a rural development program for a local area is that of county committees. Before a program is formulated and adopted, it is desirable to obtain such basic information as is indicated in the U. S. Department of Agriculture publication mentioned before, "A Guide for Studying the Economy of Pilot Counties in the Rural Development Program." Such data make it possible to determine what type of program is feasible and can be recommended for adoption.

Four Georgia counties have to date been designated as pilot counties in the Rural Development Program. Projects in these counties are demonstrating methods, organizations, and services that can be effective in other areas. Habersham County, one of these four, is in area A. Merriwether County is in area B. Twiggs County in central Georgia is in area C but adjoins area B. Wayne, the fourth pilot county, is in area C.

Figure 10

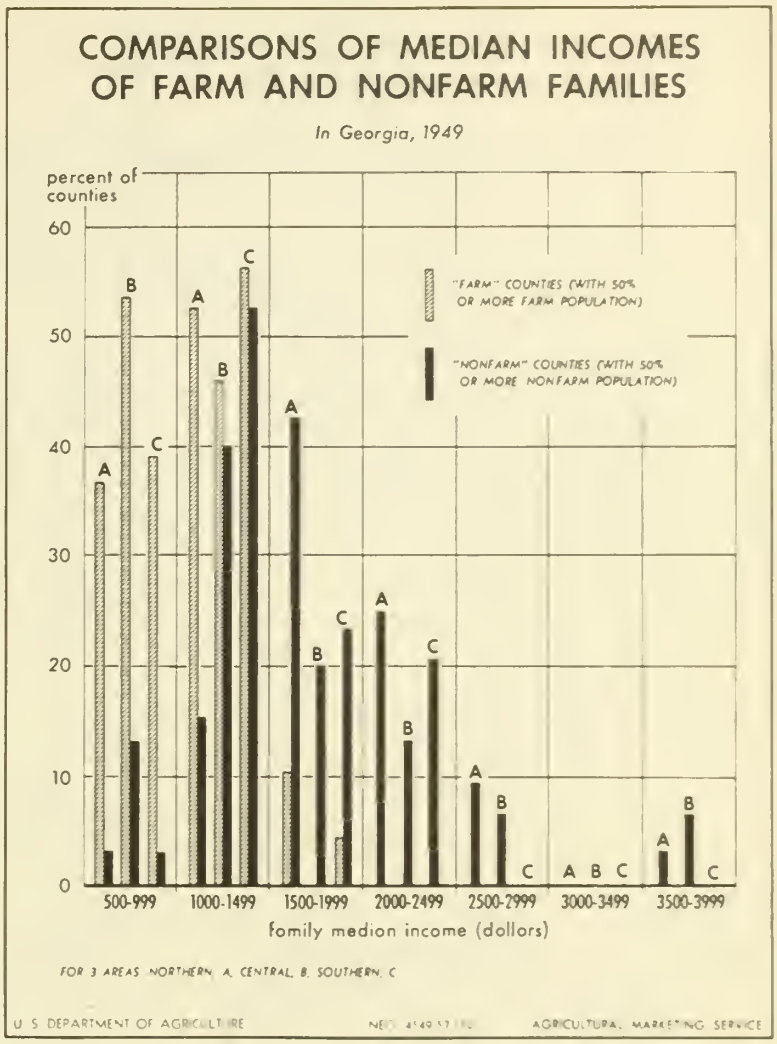


Table 16.--Distribution of counties in 3 areas of Georgia according to size of median family income and residence (farm or nonfarm) of majority of population, 1949

Size of median family income 1/	Counties with populations more than 50 percent nonfarm or farm in--											
	Area A				Area B				Area C			
	Nonfarm		Farm		Nonfarm		Farm		Nonfarm		Farm	
Dol.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
500 to 999	1	3.1	7	36.8	2	13.3	7	53.8	1	3.0	18	39.1
1,000 to 1,499	5	15.6	10	52.7	6	40.0	6	46.2	18	52.9	26	56.5
1,500 to 1,999	14	43.8	2	10.5	3	20.0	--	--	8	23.5	2	4.4
2,000 to 2,499	8	25.0	--	--	2	13.3	--	--	7	20.6	--	--
2,500 to 2,999	3	9.4	--	--	1	6.7	--	--	--	--	--	--
3,000 to 3,499	--	--	--	--	--	--	--	--	--	--	--	--
3,500 to 3,999	1	3.1	--	--	1	6.7	--	--	--	--	--	--
Total	32	100.0	19	100.0	15	100.0	13	100.0	34	100.0	46	100.0

1/ Based on 20-percent sample. 1950 Census of Population, vol. II, part II, table 45.

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